

Amendments to the Claims:

Please amend the claims as shown in the Claims Listing, which replaces all previous Claims Listings.

Claim Listing:

1. (Currently Amended) An isolated immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula C*pG ~~5'-pyrimidine-purine-3'~~, wherein the immunostimulatory oligonucleotide compound is at least 6 nucleotides in length, and wherein C* is a pyrimidine nucleoside having formula (I):



wherein D is a hydrogen bond donor, D' is selected from the group consisting of hydrogen, hydrogen bond donor, hydrophilic group, hydrophobic group, electron donating group, A is a hydrogen bond acceptor or a hydrophilic group, X is carbon or nitrogen, and S is a pentose or hexose sugar ring, provided that the pyrimidine nucleoside of formula (I) is not cytidine or deoxycytidine, pyrimidine is a non-natural pyrimidine nucleoside selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethyleytosine, N4-alkyleytosine N4-ethyleytosine, aracytosine and 4-thiouracil and purine is a natural or non-natural purine nucleoside G is guanosine, 2'-deoxyguanosine, or a guanosine analog, and p is an internucleotide linkage selected from the group consisting of phosphorothioate, and phosphorodithioate.

2. (Currently Amended) An isolated immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula C*pG, wherein the immunostimulatory oligonucleotide compound is at least 6 nucleotides in length, and wherein C* is a cytidine analog selected from the group consisting of 5-hydroxycytosine,

5-hydroxymethylcytosine, N4-alkylcytosine ~~N4-ethyleytosine~~, aracytosine and 4-thiouracil, G is guanosine, 2'-deoxyguanosine, or a guanosine analog, and p is an internucleotide linkage selected from the group consisting of ~~phosphodiester~~, phosphorothioate, and phosphorodithioate.

3.-6. (Cancelled)

7. (Currently Amended) The immunostimulatory oligonucleotide compound of claim 1, wherein the ~~non-natural~~ pyrimidine nucleoside of formula (**I**) comprises a non-naturally occurring sugar moiety.

8. (Currently Amended) The immunostimulatory oligonucleotide compound of claim ~~[[0]]~~ 7, wherein the non-naturally occurring sugar moiety is arabinose and arabinose derivatives.

9-38. (Cancelled)

39. (Currently Amended) ~~An immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein the immunostimulatory oligonucleotide compound is at least 6 nucleotides in length, and wherein pyrimidine is~~ The immunostimulatory oligonucleotide compound of claim 2, wherein C* is 5-hydroxycytosine and the oligonucleotide further comprises a phosphorothioate internucleotide linkage.

40. (Currently Amended) The immunostimulatory oligonucleotide compound of claim 2 ~~[[1]]~~, wherein the ~~non-natural~~ pyrimidine nucleoside C* is 5-hydroxymethylcytosine.

41. (Currently Amended) The immunostimulatory oligonucleotide compound of claim 2 ~~[[1]]~~, wherein the ~~non-natural~~ pyrimidine nucleoside C* is N4-alkylcytosine ~~N4-ethyleytosine~~.

42. (Currently Amended) The immunostimulatory oligonucleotide compound of claim 2 ~~[[1]]~~, wherein the ~~non-natural~~ pyrimidine nucleoside C* is aracytosine.

43. (Currently Amended) The immunostimulatory oligonucleotide compound of claim 2 ~~[[1]]~~, wherein ~~the non-natural pyrimidine nucleoside~~ C* is 4-thiouracil.